

# **Exhibit F-1**

**Claim Chart Showing Infringement of U.S. Patent No. 10,495,823 by MPO Connectors**

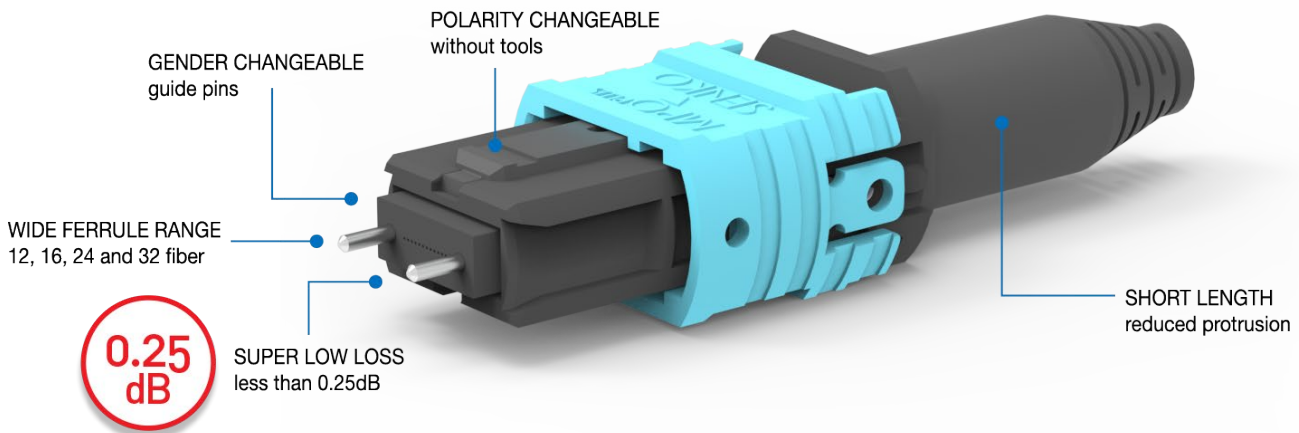
Certain fiber-optic connectors infringe U.S. Patent No. 10,495,823 (the “’823 Patent”), including at least the MPO Plus connector (the “Representative Connector”), the MPO Plus Premium Mini connector, and any product that operates in a manner reasonably similar to the foregoing (collectively, the “’823 Accused Products”).

US Conec Ltd. (“US Conec”) contends that each of the ’823 Accused Products directly and/or indirectly infringes the asserted claims of the ’823 Patent. US Conec contends that each of the limitations is met literally, and, to the extent a limitation is not met literally, it is met under the doctrine of equivalents. These infringement contentions are provided based on information obtained to date and may not be exhaustive.

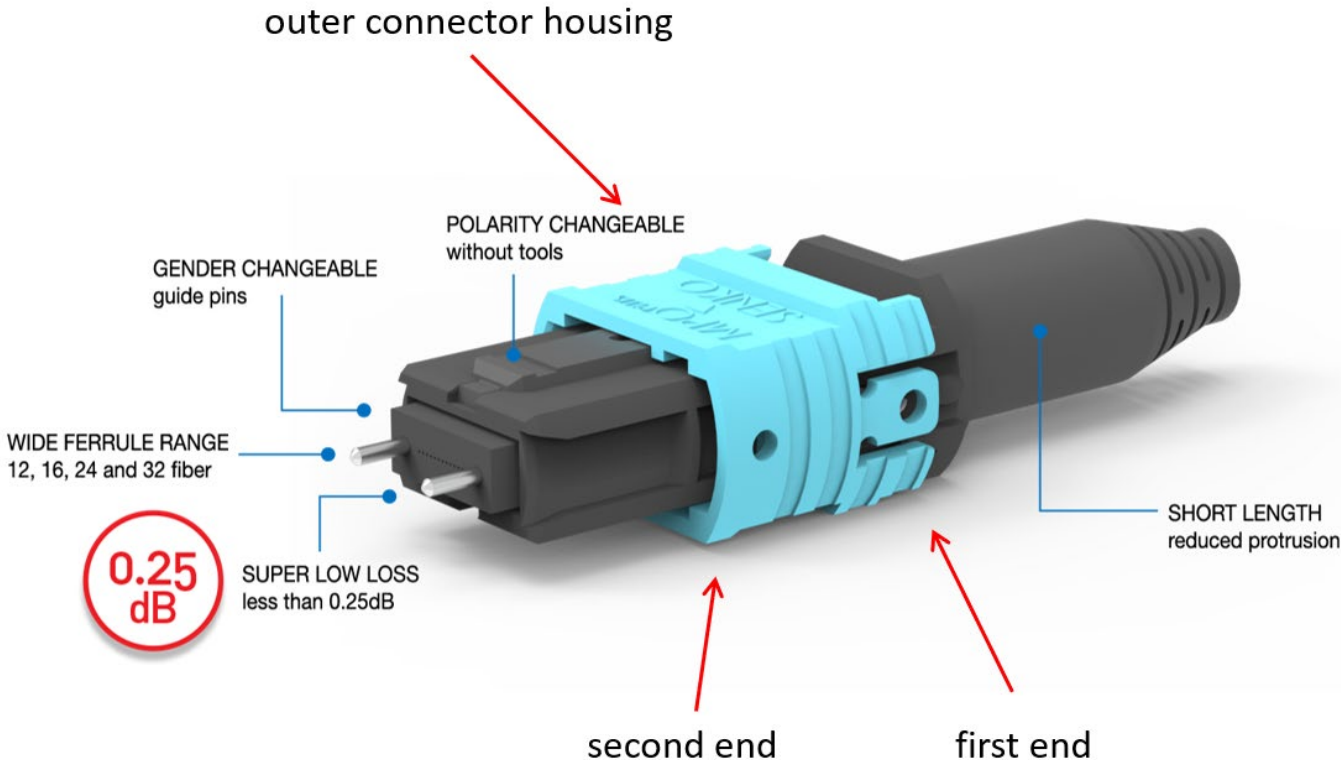
Based on information presently available to US Conec, US Conec contends that certain Defendants, including, but not limited to, Senko Advance Co., Ltd. and Shenzhen UnitekFiber Solution Ltd., as defined in the Complaint, directly and/or indirectly infringe the asserted claims of the ’823 Patent by engaging in the design, development, manufacture, importation, and/or selling after importation of the ’823 Accused Products and products incorporating the same.

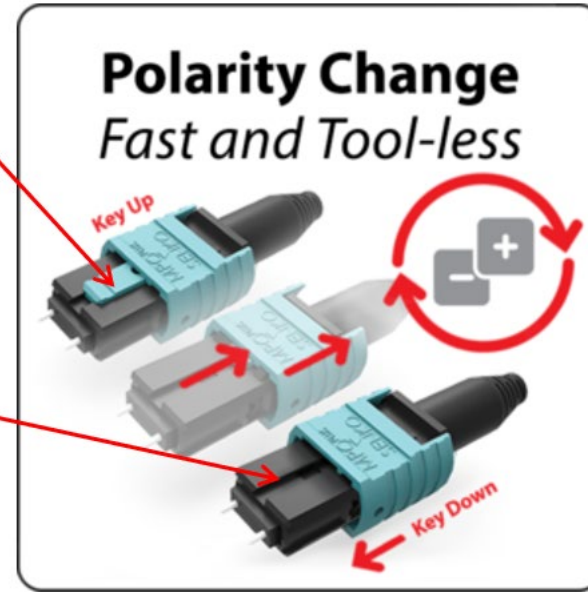
US Conec’s investigation of the infringement is ongoing. US Conec reserves the right to supplement and/or amend these disclosures to identify additional asserted claims and accused products, and/or to further identify where each element of each asserted claim is found in each accused product, including on the basis of discovery obtained from Defendants and from third parties during the course of this litigation. The claim chart provided below is based on information currently available to US Conec and is intended to be exemplary in nature.

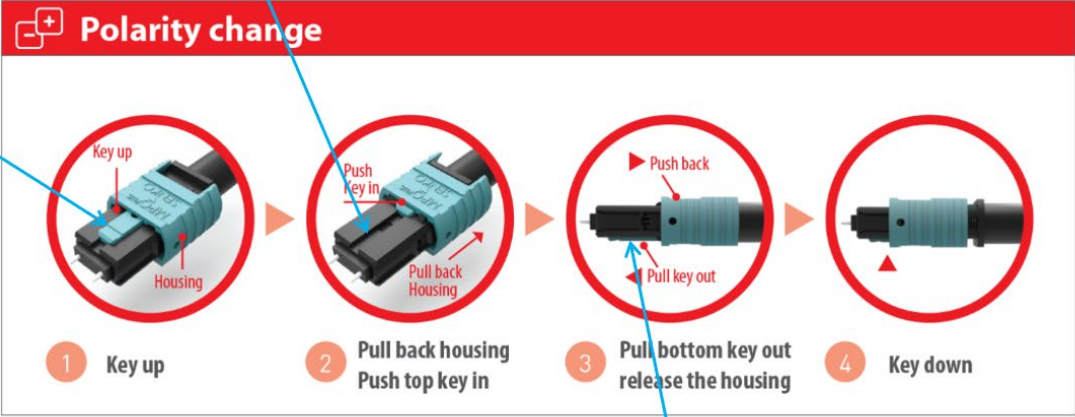
<b>U.S. Patent No. 10,495,823</b>	<b>Description of Infringement by ’823 Accused Products</b>
<b>Independent Claim 1</b>	
<b>[1.pre]</b> A fiber optic connector with multiple optical fibers therein comprising:	<p>To the extent the preamble is limiting, each of the ’823 Accused Products is a fiber optic connector with multiple optical fibers therein.</p> <p>See, for example, the website for the Representative Connector, excerpted below.</p>

U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
	 <p>GENDER CHANGEABLE guide pins</p> <p>WIDE FERRULE RANGE 12, 16, 24 and 32 fiber</p> <p>POLARITY CHANGEABLE without tools</p> <p>SHORT LENGTH reduced protrusion</p> <p><b>0.25 dB</b></p> <p>SUPER LOW LOSS less than 0.25dB</p> <p><a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p> <p>See also, for example, the Representative Connector, excerpted below.</p>

U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
	<p><b>MPO Plus Mini, ready for 40/100G Ethernet Migration</b></p> <p>Unlike traditional 10GbE transmission which utilizes a 2-fiber configuration, the 40GbE and 100GbE are implemented over multi fiber array MPO connectors. It is critical that proper connector orientations are established. The TIA 568 standard provides three methods for configuring systems to ensure that proper connections are made.</p> <p>Each MPO connector has a key on one side of the connector body. The "Key Up" position refers to the orientation where the key is located at the top position of the connector. When looking at the end face of the connector, position 1 is on the far left while position 12 is on the far right. Depending on the adopted connectivity orientation, the MPO adapter needs to be suitable for its application, which is either "Key Up to Key Down" or "Key Up to Key Up". In addition, MPO connectors are differentiated to a Male and Female connector. A Male MPO connector has two alignment pins while a Female MPO connector has two alignment holes where the pins are to be inserted when a connection is made. An MPO connection can only be performed between a Male and Female connector to ensure proper alignment which is required to maintain a low loss connection. SENKO's MPO Plus MINI Connector allows end users to freely change Polarity or Gender in the field, which gives great flexibility in network configuration.</p> <p><a href="https://www.senko.com/wp-content/uploads/2021/09/MPO-Plus-Brochure-2022_pages.pdf">https://www.senko.com/wp-content/uploads/2021/09/MPO-Plus-Brochure-2022_pages.pdf</a></p>
[1.a] an outer housing having a passageway extending between a first end and a second end;	<p>Each of the '823 Accused Products has an outer housing having a passageway extending between a first end and a second end.</p> <p>See, for example, the website for the Representative Connector, excerpted below.</p>

U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
	 <p>outer connector housing</p> <p>POLARITY CHANGEABLE without tools</p> <p>GENDER CHANGEABLE guide pins</p> <p>WIDE FERRULE RANGE 12, 16, 24 and 32 fiber</p> <p>0.25 dB</p> <p>SUPER LOW LOSS less than 0.25dB</p> <p>SHORT LENGTH reduced protrusion</p> <p>second end</p> <p>first end</p> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p>
[1.b] first and second key slots and two separate first and second movable key structures within at least a portion of the passageway in	<p>Each of the '823 Accused Products has first and second key slots and two separate first and second movable key structures within at least a portion of the passageway in the outer housing, where the first and second key slots each maintain a respective first and second movable key structure simultaneously, the first and second key slots and respective first and second movable key structures retained therein and being located on opposing sides of the fiber optic connector.</p> <p>See, for example, the website for the Representative Connector, excerpted below.</p>

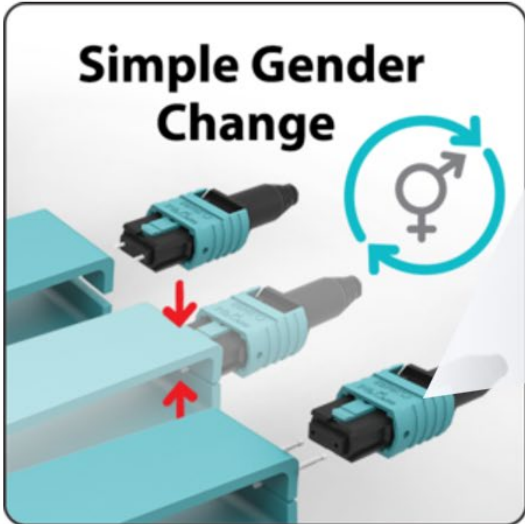
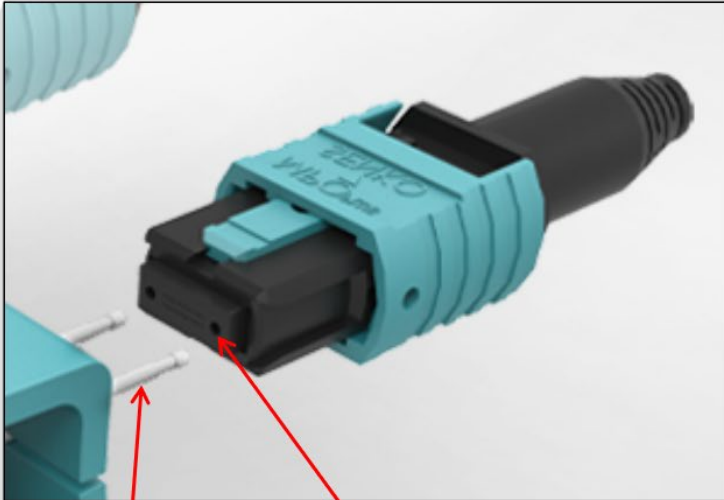
U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
<p>the outer housing, where the first and second key slots each maintain a respective first and second movable key structure simultaneously, the first and second key slots and respective first and second movable key structures retained therein and being located on opposing sides of the fiber optic connector,</p>	<div>key structure</div> <div>key slot</div> <div>  <p><b>Polarity Change Fast and Tool-less</b></p> <p>The diagram illustrates a fiber optic connector with a teal-colored housing and a black plug. It shows three states of the connector: 'Key Up' (top), a middle state, and 'Key Down' (bottom). Red arrows indicate the movement of the key structure into and out of the key slot. A red circular arrow with a '+' and '-' sign indicates a polarity change. The text 'Polarity Change Fast and Tool-less' is prominently displayed at the top of the diagram.</p> </div> <p><i>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></i></p>

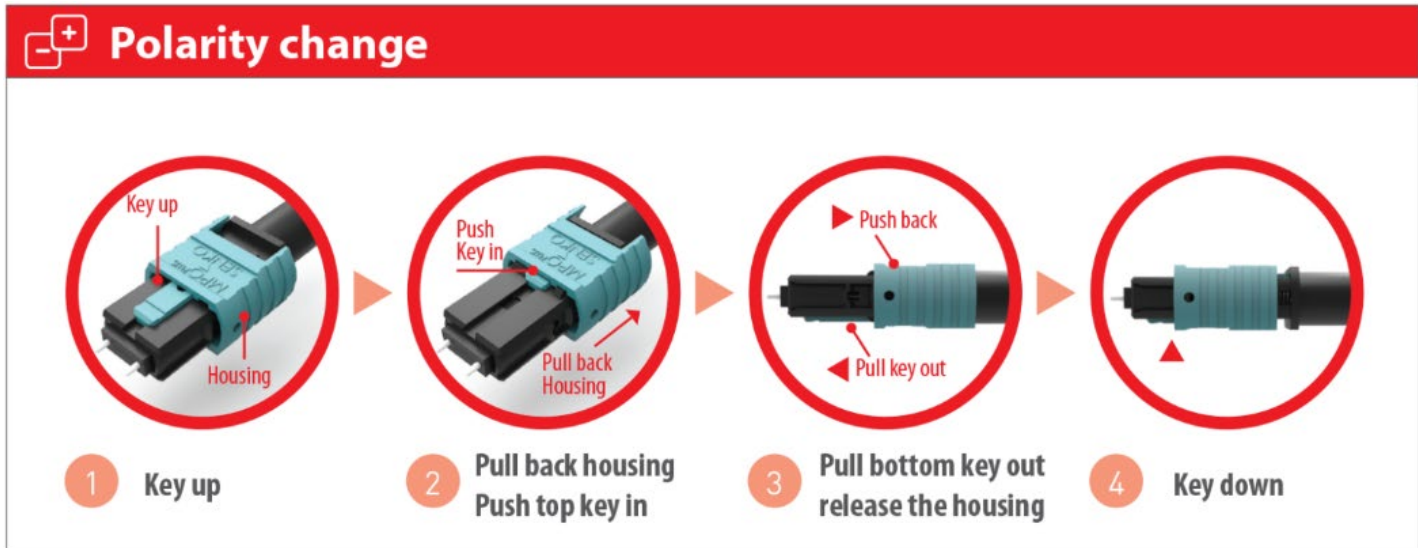
U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
	<p>1<sup>st</sup> key slot</p> <p>1<sup>st</sup> key structure</p>  <p>2<sup>nd</sup> key structure in 2<sup>nd</sup> key slot</p> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p>
<p><b>[1.c]</b> the first and second movable key structures being movable within the respective first and second key slots, but otherwise retained within and movable without opening the fiber optic connector, the first</p>	<p>In each of the '823 Accused Products, the first and second movable key structures are movable within the respective first and second key slots, but otherwise retained within and movable without opening the fiber optic connector, and the first and second movable key structures provided within the fiber optic connector are configured to set the polarity of the multiple optical fibers within the fiber optic connector.</p> <p>See, for example, the website for the Representative Connector, excerpted below.</p>



U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
<p>and second movable key structures being provided within the fiber optic connector are configured to set the polarity of the multiple optical fibers within the fiber optic connector; and</p>	<div> <p><b>Polarity change</b></p> <p>1 Key up</p> <p>2 Pull back housing Push key in</p> <p>3 Pull bottom key out release the housing</p> <p>4 Key down</p> </div> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p> <p>See also, for example, the Representative Connector, excerpted below.</p> <p><b>MPO Plus Mini, ready for 40/100G Ethernet Migration</b></p> <p>Unlike traditional 10GbE transmission which utilizes a 2-fiber configuration, the 40GbE and 100GbE are implemented over multi fiber array MPO connectors. It is critical that proper connector orientations are established. The TIA 568 standard provides three methods for configuring systems to ensure that proper connections are made.</p> <p>Each MPO connector has a key on one side of the connector body. The "Key Up" position refers to the orientation where the key is located at the top position of the connector. When looking at the end face of the connector, position 1 is on the far left while position 12 is on the far right. Depending on the adopted connectivity orientation, the MPO adapter needs to be suitable for its application, which is either "Key Up to Key Down" or "Key Up to Key Up". In addition, MPO connectors are differentiated to a Male and Female connector. A Male MPO connector has two alignment pins while a Female MPO connector has two alignment holes where the pins are to be inserted when a connection is made. An MPO connection can only be performed between a Male and Female connector to ensure proper alignment which is required to maintain a low loss connection. SENKO's MPO Plus MINI Connector allows end users to freely change Polarity or Gender in the field, which gives great flexibility in network configuration.</p> <p>See <a href="https://www.senko.com/wp-content/uploads/2021/09/MPO-Plus-Brochure-2022_pages.pdf">https://www.senko.com/wp-content/uploads/2021/09/MPO-Plus-Brochure-2022_pages.pdf</a></p>

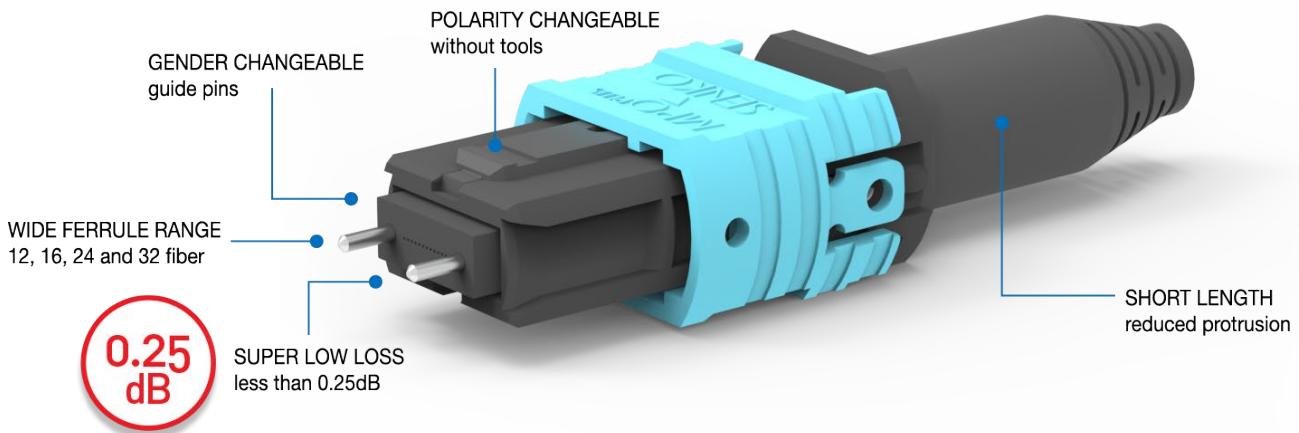


U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
<p><b>[1.d]</b> either one of guide pins or guide pin receiving holes for guiding a connection with a second fiber optic connector,</p>	<p>Each of the '823 Accused Products has either one of guide pins or guide pin receiving holes for guiding a connection with a second fiber optic connector.</p> <p>See, for example, the website for the Representative Connector, excerpted below.</p> <div>  <p><b>Simple Gender Change</b></p> </div> <div>  <p>guide pins</p> <p>guide pin receiving holes</p> </div> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p>
<p><b>[1.e]</b> wherein the first and second key structures are movable within their</p>	<p>In each of the '823 Accused Products, the first and second key structures are movable within their respective first and second key slots between a forward active position where the movable key structure is moved out to an exposed portion of its respective key slot towards the second end of the fiber optic connector and a retracted</p>

U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
<p>respective first and second key slots between a forward active position where the movable key structure is moved out to an exposed portion of its respective key slot towards the second end of the fiber optic connector and a retracted position where the movable key structure is moved out of the exposed portion of its respective key slot into and towards the first end of the outer housing</p>	<p>position where the movable key structure is moved out of the exposed portion of its respective key slot into and towards the first end of the outer housing.</p> <p>See, for example, the '823 Accused Product Brochure, excerpted below.</p> <div>  </div> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p>
<p><b>[1.f]</b> such that when the first key structure is in the forward active position, the multiple optical fibers presented within the fiber optic connector are in a first polarity, and</p>	<p>In each of the '823 Accused Products, when the first key structure is in the forward active position, the multiple optical fibers presented within the fiber optic connector are in a first polarity, and when the second key structure is in the forward active position, the multiple optical fibers are in a second polarity reversed from the first polarity.</p> <p>See, for example, the '823 Accused Product website, excerpted below.</p>

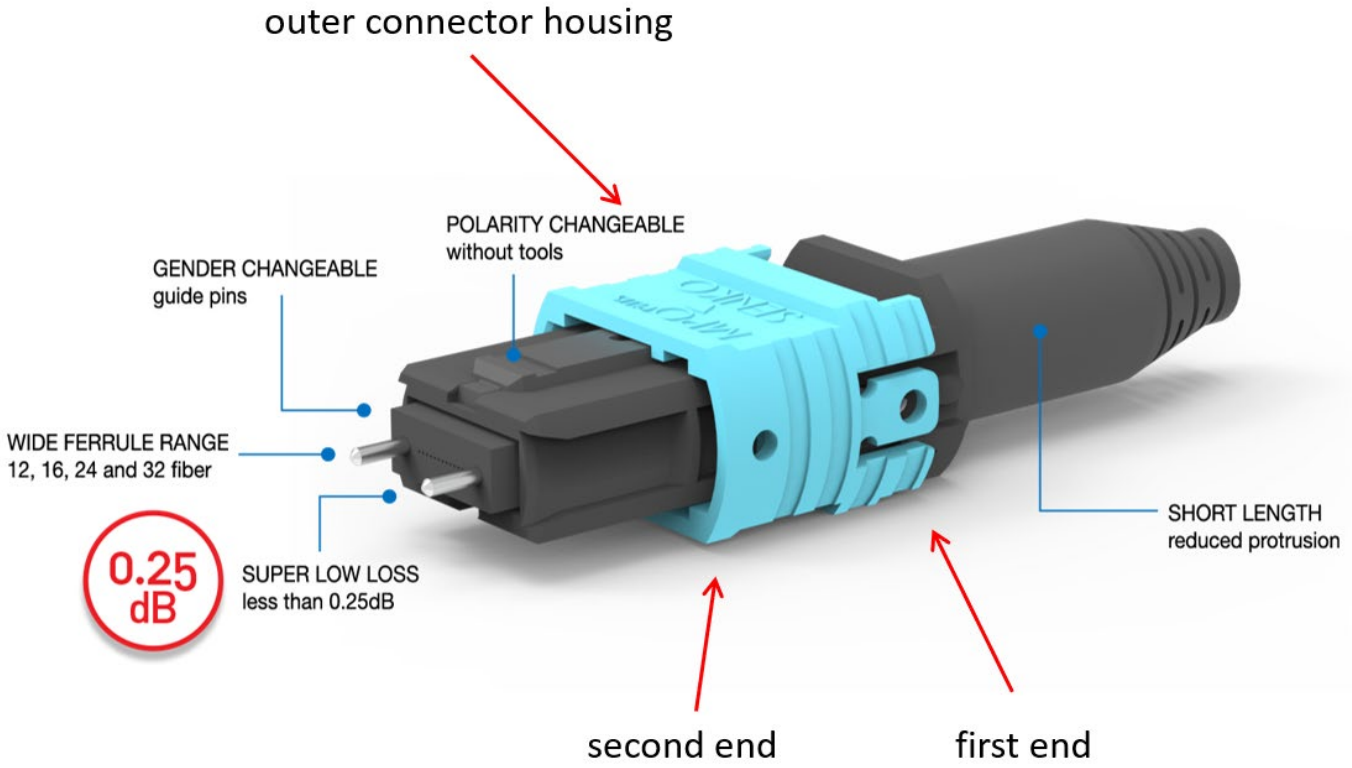
U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
<p>when the second key structure is in the forward active position, the multiple optical fibers are in a second polarity reversed from the first polarity.</p>	<div> <p><b>Polarity change</b></p> <p>1 Key up</p> <p>2 Pull back housing Push top key in</p> <p>3 Pull bottom key out release the housing</p> <p>4 Key down</p> </div> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p> <p>See, for example, the '823 Accused Product Brochure, excerpted below.</p> <p><b>MPO Plus Mini, ready for 40/100G Ethernet Migration</b></p> <p>Unlike traditional 10GbE transmission which utilizes a 2-fiber configuration, the 40GbE and 100GbE are implemented over multi fiber array MPO connectors. It is critical that proper connector orientations are established. The TIA 568 standard provides three methods for configuring systems to ensure that proper connections are made.</p> <p>Each MPO connector has a key on one side of the connector body. The "Key Up" position refers to the orientation where the key is located at the top position of the connector. When looking at the end face of the connector, position 1 is on the far left while position 12 is on the far right. Depending on the adopted connectivity orientation, the MPO adapter needs to be suitable for its application, which is either "Key Up to Key Down" or "Key Up to Key Up". In addition, MPO connectors are differentiated to a Male and Female connector. A Male MPO connector has two alignment pins while a Female MPO connector has two alignment holes where the pins are to be inserted when a connection is made. An MPO connection can only be performed between a Male and Female connector to ensure proper alignment which is required to maintain a low loss connection. SENKO's MPO Plus MINI Connector allows end users to freely change Polarity or Gender in the field, which gives great flexibility in network configuration.</p>

U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
	<p>See <a href="https://www.senko.com/wp-content/uploads/2021/09/MPO-Plus-Brochure-2022_pages.pdf">https://www.senko.com/wp-content/uploads/2021/09/MPO-Plus-Brochure-2022_pages.pdf</a></p> <p>See, for example, the '823 Accused Product website, excerpted below.</p> <div> </div> <p><a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p>
Independent Claim 8	
<p><b>[8.pre]</b> A fiber optic connector with multiple optical fibers therein comprising:</p>	<p>To the extent the preamble is limiting, each of the '823 Accused Products is a fiber optic connector with multiple optical fibers therein.</p> <p>See, for example, the website for the Representative Connector, excerpted below.</p>

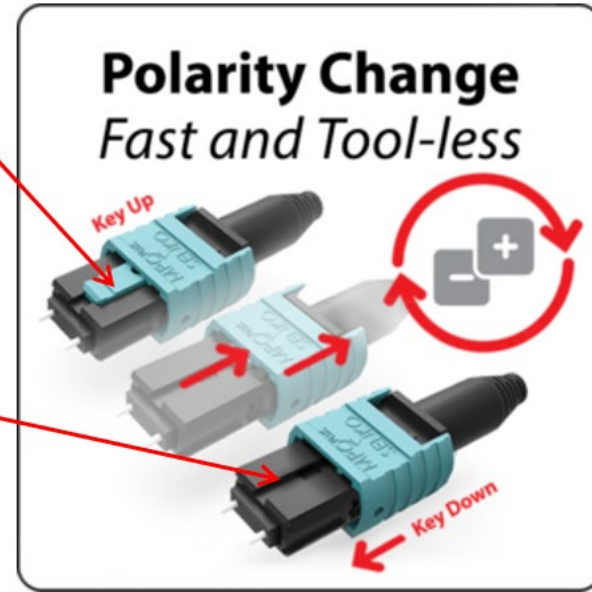
U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
	 <p>GENDER CHANGEABLE guide pins</p> <p>WIDE FERRULE RANGE 12, 16, 24 and 32 fiber</p> <p>POLARITY CHANGEABLE without tools</p> <p>SHORT LENGTH reduced protrusion</p> <p>0.25 dB</p> <p>SUPER LOW LOSS less than 0.25dB</p> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p> <p>See also, for example, the Representative Connector, excerpted below.</p>

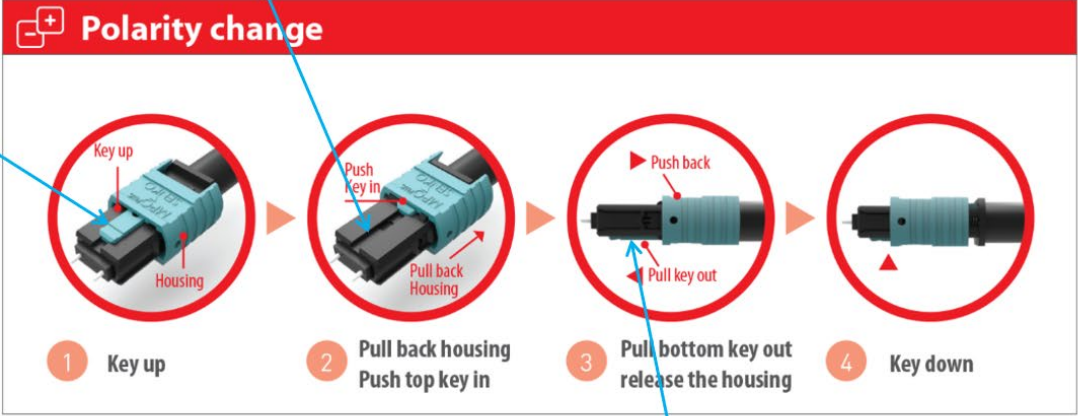
U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
	<p><b>MPO Plus Mini, ready for 40/100G Ethernet Migration</b></p> <p>Unlike traditional 10GbE transmission which utilizes a 2-fiber configuration, the 40GbE and 100GbE are implemented over multi fiber array MPO connectors. It is critical that proper connector orientations are established. The TIA 568 standard provides three methods for configuring systems to ensure that proper connections are made.</p> <p>Each MPO connector has a key on one side of the connector body. The "Key Up" position refers to the orientation where the key is located at the top position of the connector. When looking at the end face of the connector, position 1 is on the far left while position 12 is on the far right. Depending on the adopted connectivity orientation, the MPO adapter needs to be suitable for its application, which is either "Key Up to Key Down" or "Key Up to Key Up". In addition, MPO connectors are differentiated to a Male and Female connector. A Male MPO connector has two alignment pins while a Female MPO connector has two alignment holes where the pins are to be inserted when a connection is made. An MPO connection can only be performed between a Male and Female connector to ensure proper alignment which is required to maintain a low loss connection. SENKO's MPO Plus MINI Connector allows end users to freely change Polarity or Gender in the field, which gives great flexibility in network configuration.</p> <p>See <a href="https://www.senko.com/wp-content/uploads/2021/09/MPO-Plus-Brochure-2022_pages.pdf">https://www.senko.com/wp-content/uploads/2021/09/MPO-Plus-Brochure-2022_pages.pdf</a></p>
[8.a] an outer housing having a passageway extending between a first end and a second end;	<p>Each of the '823 Accused Products has an outer housing having a passageway extending between a first end and a second end.</p> <p>See, for example, the website for the Representative Connector, excerpted below.</p>



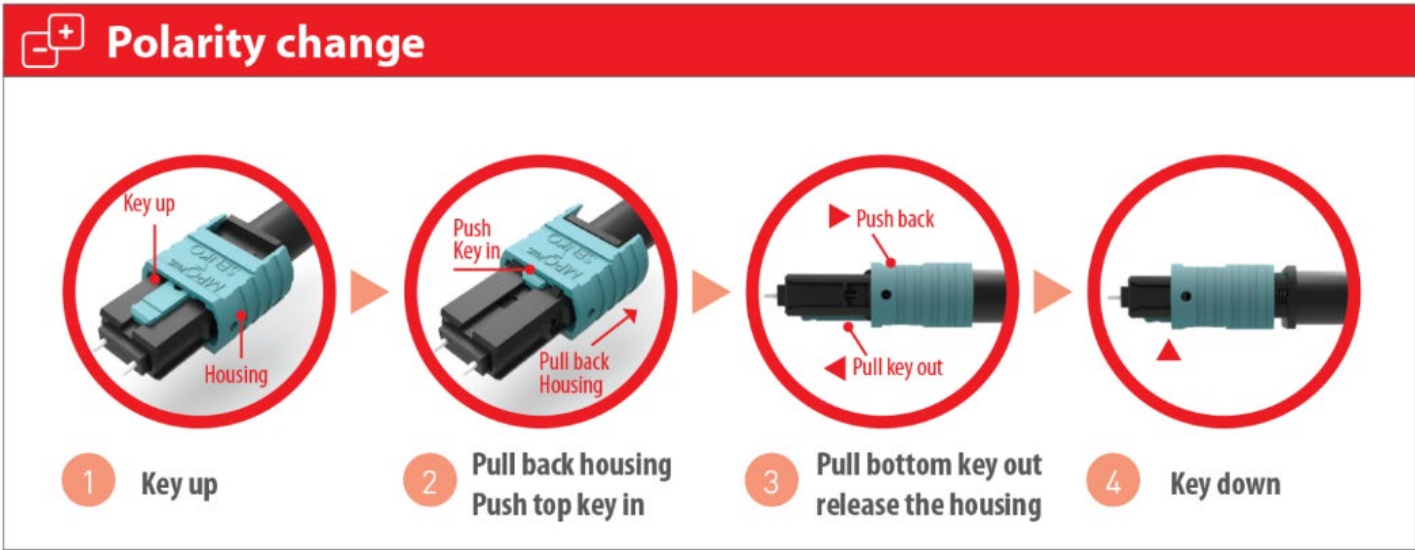
U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
	 <p>outer connector housing</p> <p>POLARITY CHANGEABLE without tools</p> <p>GENDER CHANGEABLE guide pins</p> <p>WIDE FERRULE RANGE 12, 16, 24 and 32 fiber</p> <p>0.25 dB</p> <p>SUPER LOW LOSS less than 0.25dB</p> <p>SHORT LENGTH reduced protrusion</p> <p>second end</p> <p>first end</p> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p>
[8.b] first and second key slots and two separate first and second movable key structures within at least a portion of the passageway in	Each of the '823 Accused Products has first and second key slots and two separate first and second movable key structures within at least a portion of the passageway in the outer housing, where the first and second key slots each maintain a respective first and second movable key structure simultaneously, the first and second key slots and respective first and second movable key structures retained therein and being located on opposing sides of the fiber optic connector.



U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
<p>the outer housing, where the first and second key slots each maintain a respective first and second movable key structure simultaneously, the first and second key slots and respective first and second movable key structures retained therein and being located on opposing sides of the fiber optic connector; and</p>	<p>See, for example, the website for the Representative Connector, excerpted below.</p> <div>key structure</div> <div>key slot</div> <div>  <p><b>Polarity Change</b> <i>Fast and Tool-less</i></p> <p>Key Up</p> <p>Key Down</p> </div> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p>

U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
	<p>1<sup>st</sup> key slot</p> <p>1<sup>st</sup> key structure</p>  <p>2<sup>nd</sup> key structure in 2<sup>nd</sup> key slot</p> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p>
<p><b>[8.c]</b> the first and second movable key structures being movable within the respective first and second key slots, but otherwise retained within and movable without opening the fiber optic connector, the first</p>	<p>In each of the '823 Accused Products the first and second movable key structures are movable within the respective first and second key slots, but otherwise retained within and movable without opening the fiber optic connector, the first and second movable key structures being provided within the fiber optic connector.</p> <p>See, for example, the website for the Representative Connector, excerpted below.</p>

U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
<p>and second movable key structures being provided within the fiber optic connector,</p>	<div> <p><b>Polarity change</b></p> <p>1 Key up</p> <p>2 Pull back housing Push top key in</p> <p>3 Pull bottom key out release the housing</p> <p>4 Key down</p> </div> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p> <p>See also, for example, the Representative Connector, excerpted below.</p> <p><b>MPO Plus Mini, ready for 40/100G Ethernet Migration</b></p> <p>Unlike traditional 10GbE transmission which utilizes a 2-fiber configuration, the 40GbE and 100GbE are implemented over multi fiber array MPO connectors. It is critical that proper connector orientations are established. The TIA 568 standard provides three methods for configuring systems to ensure that proper connections are made.</p> <p>Each MPO connector has a key on one side of the connector body. The "Key Up" position refers to the orientation where the key is located at the top position of the connector. When looking at the end face of the connector, position 1 is on the far left while position 12 is on the far right. Depending on the adopted connectivity orientation, the MPO adapter needs to be suitable for its application, which is either "Key Up to Key Down" or "Key Up to Key Up". In addition, MPO connectors are differentiated to a Male and Female connector. A Male MPO connector has two alignment pins while a Female MPO connector has two alignment holes where the pins are to be inserted when a connection is made. An MPO connection can only be performed between a Male and Female connector to ensure proper alignment which is required to maintain a low loss connection. SENKO's MPO Plus MINI Connector allows end users to freely change Polarity or Gender in the field, which gives great flexibility in network configuration.</p> <p>See <a href="https://www.senko.com/wp-content/uploads/2021/09/MPO-Plus-Brochure-2022_pages.pdf">https://www.senko.com/wp-content/uploads/2021/09/MPO-Plus-Brochure-2022_pages.pdf</a></p>

U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
<p><b>[8.d]</b> wherein the first and second key structures are movable within their respective first and second key slots between a forward active position where the movable key structure is moved into an exposed portion of its respective key slot and a retracted position where the movable key structure is moved out of the exposed portion of its respective key slot and farther into the outer housing,</p>	<p>In each of the '823 Accused Products the first and second key structures are movable within their respective first and second key slots between a forward active position where the movable key structure is moved into an exposed portion of its respective key slot and a retracted position where the movable key structure is moved out of the exposed portion of its respective key slot and farther into the outer housing.</p> <p>See, for example, the '823 Accused Product Brochure, excerpted below.</p>  <p>The diagram illustrates a four-step process for changing the polarity of a fiber optic connector. It is titled 'Polarity change' in a red banner. The steps are numbered 1 through 4, each with a corresponding image of the connector in a different state:</p> <ul style="list-style-type: none"> <li><b>1 Key up:</b> The top key is in the 'up' position, and the bottom key is in the 'down' position. Labels point to the 'Key up' and 'Housing'.</li> <li><b>2 Pull back housing Push top key in:</b> The top key is pushed into the housing, and the bottom key is pulled back. Labels point to 'Push Key in' and 'Pull back Housing'.</li> <li><b>3 Pull bottom key out release the housing:</b> The bottom key is pulled out of the housing, and the top key is released. Labels point to 'Push back' and 'Pull key out'.</li> <li><b>4 Key down:</b> The top key is in the 'down' position, and the bottom key is in the 'up' position. A label points to the 'Key down'.</li> </ul> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p>
<p><b>[8.e]</b> such that when the first key structure is in the forward active position, the multiple optical fibers that are within the fiber optic connector are in a first polarity, the multiple optical fibers that are within the fiber optic</p>	<p>In the '823 Accused Products, when the first key structure is in the forward active position, the multiple optical fibers that are within the fiber optic connector are in a first polarity, and when the second key structure is in the forward active position, the multiple optical fibers are in a second polarity reversed from the first polarity.</p> <p>See, for example, the '823 Accused Product website, excerpted below.</p>

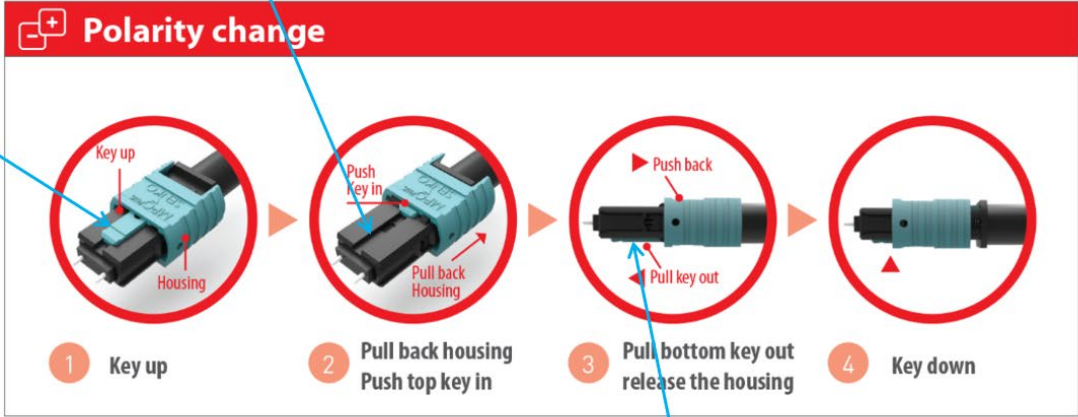
U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
<p>connector are in a first polarity, and when the second key structure is in the forward active position, the multiple optical fibers are in a second polarity reversed from the first polarity.</p>	<div> <p><b>Polarity change</b></p> <p>1 Key up</p> <p>2 Pull back housing Push top key in</p> <p>3 Pull bottom key out release the housing</p> <p>4 Key down</p> </div> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p> <p>See, for example, the '823 Accused Product Brochure, excerpted below.</p> <p><b>MPO Plus Mini, ready for 40/100G Ethernet Migration</b></p> <p>Unlike traditional 10GbE transmission which utilizes a 2-fiber configuration, the 40GbE and 100GbE are implemented over multi fiber array MPO connectors. It is critical that proper connector orientations are established. The TIA 568 standard provides three methods for configuring systems to ensure that proper connections are made.</p> <p>Each MPO connector has a key on one side of the connector body. The "Key Up" position refers to the orientation where the key is located at the top position of the connector. When looking at the end face of the connector, position 1 is on the far left while position 12 is on the far right. Depending on the adopted connectivity orientation, the MPO adapter needs to be suitable for its application, which is either "Key Up to Key Down" or "Key Up to Key Up". In addition, MPO connectors are differentiated to a Male and Female connector. A Male MPO connector has two alignment pins while a Female MPO connector has two alignment holes where the pins are to be inserted when a connection is made. An MPO connection can only be performed between a Male and Female connector to ensure proper alignment which is required to maintain a low loss connection. SENKO's MPO Plus MINI Connector allows end users to freely change Polarity or Gender in the field, which gives great flexibility in network configuration.</p> <p>See <a href="https://www.senko.com/wp-content/uploads/2021/09/MPO-Plus-Brochure-2022_pages.pdf">https://www.senko.com/wp-content/uploads/2021/09/MPO-Plus-Brochure-2022_pages.pdf</a></p>

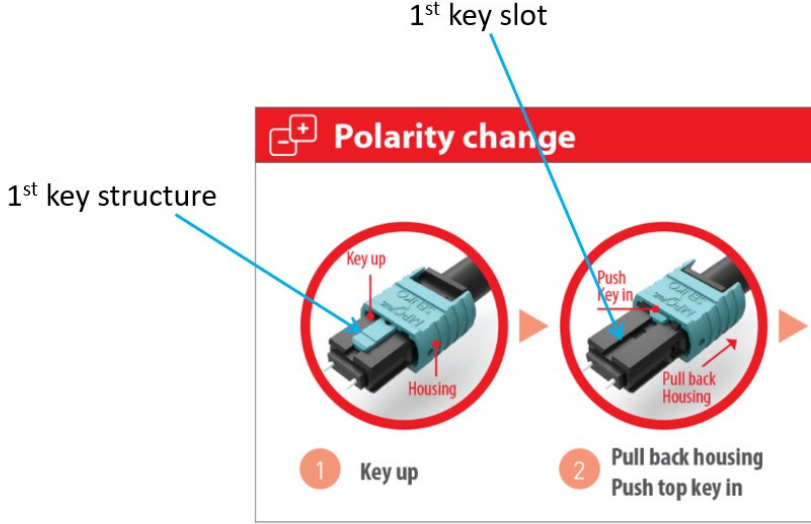


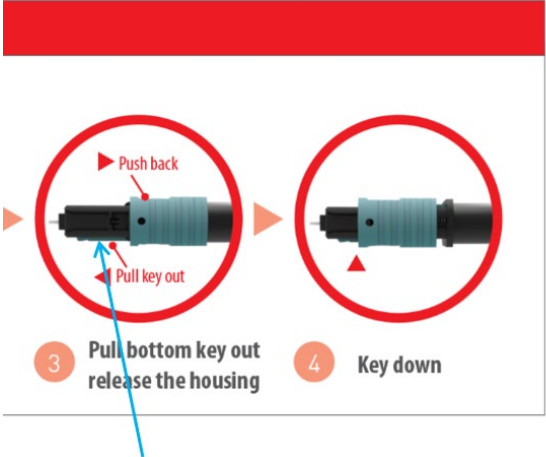
U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
	<p>See, for example, the '823 Accused Product website, excerpted below.</p> <div> <p>The diagram illustrates a method for changing the polarity of a fiber optic connector without tools. It shows three connectors in different states. The top connector is labeled 'Key Up' and has a '+' sign. The middle connector is labeled 'Key Down' and has a '-' sign. A red circular arrow indicates the transition between the two states. The text 'Polarity Change Fast and Tool-less' is prominently displayed at the top of the diagram.</p> </div> <p><a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p>
Independent Claim 10	
<p><b>[10.pre]</b> A method for changing a polarity of a fiber optic connector having two polarity key structures on opposite sides of the fiber optic connector inside respective first and second key</p>	<p>To the extent the preamble is limiting, each of the '823 Accused Products has been used and is specifically designed by Senko to allow a user to change a polarity of a fiber optic connector having two polarity key structures on opposite sides of the fiber optic connector inside respective first and second key slots, a first key structure of the two polarity key structures being in a first position indicating a first polarity of the fiber optic connector and the second key structure of the two polarity key structures simultaneously being in a second position different from the first position, each of the first and the second key structures being movable into respective first and second positions within the respective first and second key slots, the method comprising:</p> <p>See, for example, the '823 Accused Product website, excerpted below.</p>

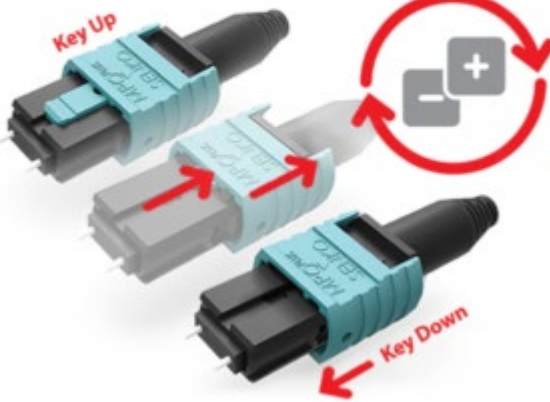
U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
<p>slots, a first key structure of the two polarity key structures being in a first position indicating a first polarity of the fiber optic connector and the second key structure of the two polarity key structures simultaneously being in a second position different from the first position, each of the first and the second key structures being movable into respective first and second positions within the respective first and second key slots, the method comprising:</p>	<div>key structure</div> <div>key slot</div> <div> <p><b>Polarity Change</b> <i>Fast and Tool-less</i></p> <p>Key Up</p> <p>Key Down</p> </div> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p>





U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
	<p>1<sup>st</sup> key slot</p> <p>1<sup>st</sup> key structure</p>  <p>2<sup>nd</sup> key structure in 2<sup>nd</sup> key slot</p> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p>
[10.a] moving the first key structure in the first position to the second position within the first slot; and	<p>Each of the '823 Accused Products has been used and is specifically designed by Senko to allow a user to move the first key structure in the first position to the second position within the first slot.</p> <p>See, for example, the '823 Accused Product website, excerpted below.</p>

U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
	 <p>The diagram illustrates the process of changing the polarity of a fiber optic connector. It consists of two circular inset images showing the connector housing and key structure. The first inset, labeled '1 Key up', shows the 'Key up' and 'Housing' components. The second inset, labeled '2 Pull back housing Push top key in', shows the 'Push Key in' and 'Pull back Housing' components. A red banner at the top of the diagram reads 'Polarity change'. A blue line points from the '1st key slot' label to the top of the connector housing in the second inset. Another blue line points from the '1st key structure' label to the key structure in the first inset. The number '2' is located at the bottom right of the diagram area.</p> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p>
[10.b] moving the second key structure in the second position to the first position within the second slot thereby changing the polarity of the fiber optic connector to a second polarity,	<p>Each of the '823 Accused Products has been used and is specifically designed by Senko to allow a user to move the second key structure in the second position to the first position within the second slot thereby changing the polarity of the fiber optic connector to a second polarity.</p> <p>See, for example, the '823 Accused Product website, excerpted below.</p>

U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
	 <p>2<sup>nd</sup> key structure in 2<sup>nd</sup> key slot</p> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p>
<p><b>[10.c]</b> wherein said moving the first key structure and the second key structure is carried out without removing the first key structure and the second key structure from the fiber optic connector.</p>	<p>Each of the '823 Accused Products has been used and is specifically designed by Senko to allow a user to move the first key structure and the second key structure without removing the first key structure and the second key structure from the fiber optic connector.</p> <p>See, for example, the '823 Accused Product website, excerpted below.</p>

U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
	<div>  <p><b>Polarity Change</b> <i>Fast and Tool-less</i></p> <p>Key Up</p> <p>Key Down</p> </div> <p>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></p>

U.S. Patent No. 10,495,823	Description of Infringement by '823 Accused Products
	<div>  <b>Polarity change</b> </div> <div>  <div> <div>1 Key up</div> <div>2 Pull back housing Push top key in</div> <div>3 Pull bottom key out release the housing</div> <div>4 Key down</div> </div> </div> <p><i>See <a href="https://www.senko.com/mpo-series/">https://www.senko.com/mpo-series/</a></i></p>